

[11th March 1959]

## APPENDIX III.

[Vide answer to starred question No. 692 asked by Sri S. Lazar at the meeting of the Legislative Assembly held on 11th March 1959, page 4 supra.]

*(a) The details in brief of the Sugarcane Research Station, Cuddalore.*

Till the partition of Andhra State in 1953, the Sugarcane Research Scheme for the composite State was being worked at Anakapalle with the financial assistance of the Indian Central Sugarcane Committee. Consequent on the partition of the State in 1953; a separate Sugarcane Research Station had to be started to cater to the needs of the residuary Madras State. The Government accordingly ordered in 1955 that the Agricultural Research Station at Palur should be converted into a Central Sugarcane Research Station to carry on research work on sugarcane along with the research work done in respect of paddy, millets, etc.

2. The land available at Palur was subsequently found to be quite inadequate for successful experimentation on sugarcane in all aspects of research. The Government therefore ordered in 1956 the establishment of a full-fledged Central Sugarcane Research Station at Nellikuppam under the Second Five-Year Plan, on a separate compact block over an extent of 100 acres. The Station could not, however, be located anywhere round about Nellikuppam for want of a compact block of about 100 acres. The Station had, therefore, to be located in Vilvarayanatham, near Cuddalore just in the southern bank of the river Pennar, where a compact block of over 100 acres comprising of different soil types with adequate sub-soil water representing Nellikuppam cane tract was available. The proximity to the district headquarters was another important factor that contributed to its selection.

3. The Station was opened on 17th March 1957 with an area of 77.56 acres taken on lease in the first instance. An extent of 136.19 acres have since been acquired and handed over to the Agriculture Department. All the important trials on sugarcane research such as varietal, manurial, cultural, nutrition trials, trials to control pests and diseases, etc., were laid out in the first year. More experimental plantations were laid out in 1958-59 season. Now, that the entire area of 136.19 acres for permanent location of the Station has been acquired, all the trials will be laid out as per programme in 1959-60 season, when the new area is expected to be reclaimed. Foundation stone for the construction of residential and non-residential buildings have been laid and the construction of these buildings is expected to be taken up shortly.

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(b) *The nature of research to be carried on at the Central Sugarcane Research Station, Cuddalore.*

The new varieties received from the Sugarcane Breeding Institute, Coimbatore, will be tested under normal conditions of irrigation and manuring for selection of suitable varieties for the tract. Tests on quality of gur obtained from different varieties and from different manurial treatments will be undertaken to prescribe the best varietal and manurial schedules for gur making. Experiments on graded dose of nitrogen, phosphorus, potash, bulky organic and green manures will be conducted to prescribe the correct dosage of chemical and bulky organic manures and the right time of application to obtain the maximum return. Irrigation experiments to determine the correct amount of irrigation to be given to Sugarcane, time of planting to fix up the right time of planting of different varieties and harvest, cultural and chemical control of weeds, propping trials to prevent canes from lodging, foliar fertilization of cane, analysis of plant tissue and soil to determine the nutrition required for the crop, etc., and trials to control pests and diseases are undertaken at this Station.

(c) *How it is proposed to make use of the knowledge obtained by research.*

By having the results of the above items of research, it would be possible to prescribe the correct time of planting different varieties, the varieties to be grown in different soils, the optimum quantity of manure to be applied at right time, irrigation and cultural schedules to be adopted in cane cultivation and right time of harvest to obtain better return. By adoption of the improved methods, the cost of cultivation of sugarcane can be reduced and the production increased per unit area. The adoption of the improved methods based on results of research is expected to improve the national wealth. To a certain extent, the rural economic condition would be bettered by taking to the improved methods as the operation in cane fields are spread out throughout the year.

(d) *The steps taken to make this station serve the needs of the sugarcane areas in the State.*

This being the main station with the two sub-stations, one in Tiruchirappalli (Kumaramangalam) and another in North Arcot (Gudiyatham) district, steps will be undertaken to study problems which cannot be undertaken at the sub-stations for want of adequate facilities there. The fundamental work on several aspects of sugarcane will be confined to this station only. However, results of such trials that are of State-wide importance will be utilized for laying out further experiment at the sub-stations and the zonal farms which are situated at the respective sugarcane growing pockets in the State. This being the headquarters of the Sugarcane Specialist who directs research at these centres, problems relating to different areas are being considered by him while designing experiments for different stations and certain problems which are of State-wide importance are also investigated at the main station.